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Screening Of PGPR Isolates For Plant Growth Promoting Traits From Maize Rhizosphere Soil Samples Of Perambalur District

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ABSTRACT

The present study was undertaken to screen the efficient plant growth promoting rhizobacteria (PGPR) that were isolated form ten maize rhizosphere soil samples of Perambalur district in terms of accessing their ability in production of important plant growth promoting traits viz., phytohormones (indole acetic acid and gibberellic acid) and siderophores (catechol and salicylate types). The results revealed that the Azospirillum (MAZ-6) and Bacillus (MBA-6) isolates obtained from Krishnapuram location and the Pseudomonas (MPS-5) from Veeraganur location were found to be efficient strains in terms of exhibiting plant growth promoting traits than their respective reference strains.

Keywords: *Azospirillum, Bacillus, Pseudomonas*, IAA, GA₃, siderophores.